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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,208	09/15/2003	Michael Herscovici	ARC920030035US1	2207

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EXAMINER	
PHAM, KHANH B	

ART UNIT	PAPER NUMBER
2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/605,208	HERSCOVICI ET AL.	
	Examiner	Art Unit	
	Khanh B. Pham	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-19** are rejected under 35 U.S.C. **102(b)** as being anticipated by Christianson et al. (US 6,085,186 A), hereinafter "**Christianson**".

As per claims 1, 8, Christianson teaches a method and an article of manufacture for identify documents most relevant to a query comprising:

- "determining a query class for a received query based on statistical information regarding query terms of said received query and lexical affinities associated with permutations of said query terms" at Col. 7 line 57 to Col. 8 line 20, Col. 9 lines 2-18, and Col. 14 lines 50-65;
- "said query class associated with a routing function and a ranking function" at Col. 7 lines 30-55;
- "said routing function capable of determining subsets of the collection that most likely include the most relevant documents" at Col. 7 line 57 to Col. 8 line 20;
- "and said ranking function capable of sorting the documents in terms of relevancy" at Col. 9 lines 2-18;
- "identifying a set of indices most relevant to said query" at Col. 8 lines 50-65;

- "identifying a set of documents related to said query based on said determined indices, said identification performed via passing said ranking function associated with said determined query class along with said query to each search engine that manages a determined index from a collection of relevant indices" at Col. 12 lines 15-30;
- "collecting results ranked based upon said ranking function and merging and sorting said collected results by relevancy" at Col. 12 lines 15-30;
- "returning a subset of the highest ranked documents as the documents most relevant to the query" at Col. 12 lines 30-35.

As per claims 2, 9, Christianson teaches the method and article of manufacture of claims 1, 8, wherein "said step for determining a query class further comprise:

- analyzing user profile data, user search context and history data, log file data, and index statistics, or other query related external data" at Col. 5 lines 12-32;
- "utilizing said analyzed data in determining a query class for said search query" at Col. 5 lines 12-32.

As per claims 3, 10, Christianson teaches the method and article of manufacture of claims 1, 8, wherein "said step for identifying a set of indices further comprises the step of using routing information obtained from applying said routing function associated with said query class to determined said set of indices" at Col. 8 lines 50-65.

As per claim 4, Christianson teaches the method of claim 1, wherein "said step of returning a subset of the highest ranked documents further comprises the following step: assigning each search result item a relevancy score, and returning a predetermined subset of results from said search results" at Col. 12 lines 35-65.

As per claims 5, 11, Christianson teaches the method and article of manufacture of claims 4, 8 wherein "said method additionally comprises the step of sorting search results by said relevancy score in decreasing order prior to returning said predetermined subset of results" at Col. 12 lines 25-35.

As per claim 6, Christianson teaches the method of claim 1, wherein "said method is implemented across networks" at Col. 6 lines 10-20.

As per claim 7, Christianson teaches the method of claim 6, wherein "said across networks element comprises any of, or a combination of, the following: wide are network (WAN), local are network (LAN), cellular, wireless, or the Internet" at Col. 6 lines 10-20.

As per claims 12, 17, Christianson teaches a method and article of manufacture for retrieving information comprising the step of:

- "receiving a query" at Col. 12 lines 4;
- "parsing said query and generating a set of query terms" at Col. 14 lines 49-65;

- "identifying statistical information regarding each of said query terms and different permutations of query terms" at Col. 9 lines 2-18;
- "identifying lexical affinities associated with said permutation of query terms" at Col. 9 lines 2-18;
- "classifying said query into a query category based upon results of step c and d" at Col. 8 lines 10-20;
- "identify a set of ranking parameters associated with query category" at Col. 9 lines 45-55;
- "identifying routing information associated with said query category" at Col. 9 lines 40-45;
- "issuing a query to a search engine by applying said identified ranking parameters and said identified routing information" at Col. 12 lines 15-35;
- "receiving and rendering search results from said search engine" at Col. 12 line 30-35.

As per claim 13, Christianson teaches the method of claim 12, wherein "said step of identifying statistical information additionally comprises the step of analyzing log data" at Col. 14 line 66 to Col. 15 line 65.

As per claim 14, Christianson teaches the method of claim 12, wherein "said step of identifying statistical information additionally comprises the step of analyzing user feedback" at Col. 12 lines 50-65.

As per claim 15, Christianson teaches the method of claim 12, wherein "said method is implemented across networks" at Col. 6 lines 10-20.

As per claim 16, Christianson teaches the method of claim 15, wherein "said across networks element comprises any of, or a combination of, the following: wide are network (WAN), local are network (LAN), cellular, wireless, or the Internet" at Col. 6 lines 10-20.

As per claim 18, Christianson teaches the method of claim 1, further comprising:

- "performing steps of a-d for each of a plurality of query classes" at Col. 12 lines 7-15;
- "weighting results from each search engine for each query class according to degree of probability to which the query is associated with each of the query class" at Col. 12 line 35 to Col. 13 line 25.

As per claim 19, Christianson teaches the method of claim 12 further comprising:

- "performing steps f-l for each of a plurality of query categories" at Col. 12 lines 7-15;
- "weighting results from each search engine for each query category according to a degree of probability to which the query is associated with each of the query categories" at Col. 12 line 35 to Col. 13 line 25.

Response to Arguments

3. Applicant's arguments filed February 26, 2007 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding claims 1, 8, 12, 17, applicant argued that Christianson does not teach or suggest determining a query class based on statistical information regarding query terms" and "lexical affinities associated with permutations of said query terms". The examiner respectfully disagrees.

First, Christianson teaches at Col. 8 lines 1-10 that "from a user query, the query router determines the relevance of each information source to the given query and returns the N most relevant sources" wherein "each information source is tagged in advance with the conceptual classes for which it is relevant." Christianson therefore teaches the step of determining query class for a query, because each query is associated with a source, and the source is in turn associated with a conceptual class.

Second, Christianson at Col. 9 lines 5-10 the step of determining the query class (i.e., information source's relevance) for a query by **counting the number of query words** (i.e. "statistical information regarding query terms".) Christianson teaches the query class are determined based on statistical information regarding query terms

Third, Christianson teaches at Col. 9 lines 10-17 the step for determining query class for a phrase by "subtracting from the common maximum a normalized sum of the square of the **distance** in the page of **each word of the phrase from its successor word in the phrase**" and "if the **phrase appears contiguously** in the page the **relevance is high**, whereas if the words of the phrase are widely separated on the

page, the relevance is low". In view of applicant's specification at paragraph [0012] which defines lexical affinities as "terms that appear close to each other within a certain range", Christianson therefore anticipates the step of determining query class based on lexical affinities (i.e. distant between each word of the phrase and its successor word in the phrase") associated with permutation of said query terms (i.e., "combinations of these query terms", applicant's specification, paragraph [0029])

In light of the foregoing arguments, the 35 U.S.C 102 rejection is hereby sustained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Primary Examiner
Art Unit 2166

May 22, 2007